some variation in the functionally important regions is permissible so long as function is conserved. In some embodiments, functionally important regions can include nucleotides 3321 to 3580 of SEQ ID NO:1. As described below, nucleotides 3321 to 3580 of SEQ ID NO:2 are useful for modulating transcriptional activity in suspensor cells and/or basal regions of plant embryos.

Please amend the paragraph on page 63, lines 5-12 as follows:

Additional promoter fragments from the Scarlet Runner Bean G564 promoter were isolated and linked to a minimal 35S promoter operably linked to the GUS gene. As indicated in Figure 7, two fragments encompassing the region between –921 and –662 resulted in GUS activity in the suspensor cell. These fragments were from positions –1524 through –99 and –2064 through –99. In addition, a 187 base pair fragment (positions –913 through -767 of Figure 1) linked to the minimal 35S promoter lead to GUS expression in the suspensor cell. This result suggests that at least one suspensor-specific control element is located within the 187 base pair fragment.

REMARKS

1. Status of the Claims

In this Amendment, claims 1-77 and 79-80 are canceled. Claims 81-92 are added. Claim 78 is amended. Therefore claims 78 and 81-92 are pending and under consideration with entry of this Amendment.

A marked up copy of amended claim 78 is provided as Appendix A entitled "**MARKED UP COPY OF CLAIMS**." A listing of all pending claims is provided in Appendix B.

2. Support for the Amendments

Support for the amendments to the claims can be found throughout the specification, the drawings, and the claims as originally drafted. Support for new claim 81 can be found in Figure 2, which indicates that the -913 to -767 subsequence linked to a

basal promoter retained suspensor cell-specific activity. The sentence on page 63, lines 9-11 also describes the 187 base pair fragment, but is incorrectly labeled as positions -913 to -713. Moreover, the recited sequence is also described ("nucleotides 3329 to 3475") with reference to SEQ ID NO:1 on page 26, lines 9-10 of the specification. The remaining new claims find support in the original claims as well as in the specification as described above.

In the Office Action, the Examiner questions the relation of SEQ ID NO:1 to specific promoter sequences in recited in the specification. *See*, Office Action, last full sentence of page 3. SEQ ID NO:1 represents the region -4242 to +57 (the nucleotide before the translational start). Position +1 is the transcription start. The subsequence referred to in claim 1 (3329 to 3475 of SEQ ID NO:1) was intended to refer to positions -921 to -767 of the G564 promoter (depicted in Figure 2). However, the correct start position corresponding to "-921" is position 3321 of SEQ ID NO:1. This information is readily discernible from the sequences provided and the information in Figures 6 and 7.

The specification is now amended to correct these clear errors. For example, paragraphs on page 2 and 21 are amended to recite positions 332**1** to 3475 instead of amendment of 332**9** to 3475. As discussed above, this corrects a clear amendment in that positions 3321 to 3475 correspond to positions -921 to -662 of the G564 promoter.

Similarly, amendment to the paragraph on page 63 corrects a clear error. As filed, a sentence in the paragraph refers to a 187 base pair fragment that is at positions -913 to -713. This statement is clearly wrong because the range provided is a 200 base pair fragment, not 187. However, reference to Figure 7 clearly illustrates a 187 base pair fragment with activity corresponding to -913 to -767. Thus, the amendment merely corrects the text to correspond with the results depicted in the figures.

No new matter is introduced by this Amendment.

3. Objection to Claim 4

The Examiner objected to claim 6 as directed to a non-elected invention. Claim 6 is canceled in this Amendment, thereby rendering the objection moot.

4. Written Description Rejection

The Examiner rejected claims 1-7, 9-11, 13-15, 17-18, 20-23 and 78 as allegedly not meeting the written description requirement. Specifically, the Examiner argued that claims directed to the recited genus of polynucleotides were not sufficiently described in the specification. The Examiner however noted that the specification describes specific fragments including -913 to -713 as active. *See* Office Action, sentence spanning pages 3-4. The rejected claims are canceled, thereby rendering the rejection moot. However, to the extent the Examiner believes the rejection applies to the pending claims, Applicants respectfully traverse.

All pending claims depend directly or indirectly from new claim 81. New claim 81 is directed to a promoter polynucleotide comprising nucleotides -921 to -767 as displayed in Figure 2, wherein the promoter specifically initiates transcription in a plant suspensor cell and/or basal region of a plant embryo. For clarity, the claims now recite sequences with reference to the transcriptional start site. Nucleotides -921 to -767 are exactly the same nucleotides as nucleotides 3329 to 3475 of SEQ ID NO:1.

The specification provides specific examples demonstrating that the claimed sequence, when linked to a minimal promoter, initiates transcription in suspensor cells. *See, e.g.*, page 63, lines 9-10 of the specification, referring to an active 187 base pair fragment and Figure 7, depicting fragment -921 to -767 with a larger plus sign. Since the specification describes all of the components (i.e., the short cis-acting sequence and a minimal promoter) necessary for the desired activity, those of skill in the art would readily recognize that the inventors had possession of the claimed invention as of the filing date.

Accordingly, Applicants request withdrawal of the rejection.

5. Enablement Rejection

The Examiner rejected claims 1-7, 9-11, 13-15, 17-18, 20-23 and 78 as allegedly not enabled. Specifically, the Examiner argued that the specification does not provide sufficient guidance to select promoter variants with activity. The rejected claims are canceled, thereby rendering the rejection moot. However, to the extent the Examiner believes the rejection applies to the pending claims, Applicants respectfully traverse.

New claim 81 is directed to a promoter polynucleotide comprising nucleotides -921 to -767 as displayed in Figure 2, wherein the promoter specifically initiates transcription in a plant suspensor cell and/or basal region of a plant embryo. Thus, the claims recite a specific nucleotide sequence that is shown to have activity in the examples. *See, e.g.*, Figure 7 of the application. The issues raised by the Examiner regarding changes of promoter sequences are irrelevant for the present claims. *See*, Office Action, pages 7-9. No experimentation is required to identify a suspensor cell or basal cell-specific cis-acting element. Thus, the full scope of the pending claims is enabled by the specification. Thus, withdrawal of the rejection is requested.

6. Indefiniteness Rejections

The Examiner rejected several claims as allegedly indefinite. The rejected claims are canceled, thereby rendering the rejections moot. Moreover, the new claims do not contain the rejected language. Therefore, the present claims are not indefinite.

7. Anticipation Rejections

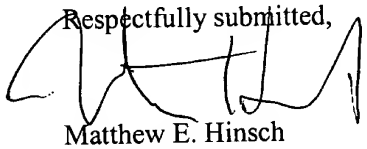
The Examiner rejected claims 1, 2, 4, 6, 17 and 78 as allegedly anticipated by either Williamson *et al.* or Staskawicz *et al.* The basis of the rejection is apparently that the references allegedly disclose promoter sequences within the scope of the canceled claims. The rejected claims are canceled, thereby rendering the rejection moot. Moreover, the references do not teach or suggest the specific sequences recited in the present claims. Accordingly, Applicants respectfully request withdrawal of the rejections.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



Matthew E. Hinsch
Reg. No. 47,651

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
Tel: 415-576-0200
Fax: 415-576-0300
MEH:meh
SF 1457215 v1

APPENDIX A

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

78. (Amended) A method of introducing an isolated polynucleotide into a host cell comprising:

(a) providing an isolated polynucleotide according to claim 81 [1]; and

(b) contacting the polynucleotide with the host cell under conditions that permit insertion of the polynucleotide into the host cell.

IN THE SPECIFICATION:

Please amend the two paragraphs on page 2, lines 15-32 as follows:

The present invention provides polynucleotides comprising a promoter control element, which comprises 1) a nucleotide sequence at least 50% identical to nucleotides 3321 [3324] to 3580 of SEQ ID NO:1, or 2) a nucleotide sequence that hybridizes to nucleotides 3321 [3324] to 3580 of SEQ ID NO:1 under a condition establishing a T_m of 20°C. In some embodiments, the isolated polynucleotides of the invention comprise a polynucleotide comprising 1) a nucleotide sequence at least 50% identical to SEQ ID NO:1, or 2) a nucleotide sequence that hybridizes to SEQ ID NO:1 under a condition establishing a T_m of 20°C. In some embodiments, the polynucleotides of the invention comprise nucleotides 3321 [3324] to 3580 of SEQ ID NO:1. In some embodiments, the polynucleotides of the invention modulate transcription in a cell. In some embodiments, the polynucleotides of the invention specifically modulate transcription in a plant suspensor cell and/or basal region of a plant embryo.

The present invention also provides expression cassettes comprising a promoter sequence comprising a nucleotide sequence at least 50% identical to

nucleotides 3321 [3324] to 3580 of SEQ ID NO:1 and a promoter polynucleotide with at least basal promoter activity, which promoter polynucleotide is operably linked to a heterologous polynucleotide, wherein when the expression cassette is inserted into a plant, the heterologous polynucleotide is specifically expressed in a suspensor cell and/or basal region of a plant embryo.

Please amend the paragraph on page 21, lines 11-17 as follows:

In contrast, less variation is permissible in the functionally important regions, since changes in the sequence can interfere with protein binding. Nonetheless, some variation in the functionally important regions is permissible so long as function is conserved. In some embodiments, functionally important regions can include nucleotides 3321 [3324] to 3580 of SEQ ID NO:1. As described below, nucleotides 3321 [3324] to 3580 of SEQ ID NO:2 are useful for modulating transcriptional activity in suspensor cells and/or basal regions of plant embryos.

Please amend the paragraph on page 63, lines 5-12 as follows:

Additional promoter fragments from the Scarlet Runner Bean G564 promoter were isolated and linked to a minimal 35S promoter operably linked to the GUS gene. As indicated in Figure 7, two fragments encompassing the region between –921 and –662 resulted in GUS activity in the suspensor cell. These fragments were from positions –1524 through –99 and –2064 through –99. In addition, a 187 base pair fragment (positions –913 through -767 [–713] of Figure 1) linked to the minimal 35S promoter lead to GUS expression in the suspensor cell. This result suggests that at least one suspensor-specific control element is located within the 187 base pair fragment.